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APPLICATION NO. FILING DATE		FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
09/942,045 08/30/2001		Jan Dietrich	085449-0112	7698	
22428	7590 11/18/2003		EXAMINER		
FOLEY AN	ID LARDNER	SHEWAREGED, BETELHEM			
SUITE 500 3000 K STRI	EET NW	ART UNIT	PAPER NUMBER		
	ON, DC 20007	1774			
		DATE MAILED: 11/18/2003			

Please find below and/or attached an Office communication concerning this application or proceeding.

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		Applicatio	n No.	Applicant(s)	<del></del>			
		09/942,04	5	DIETRICH ET AL.				
Office Action Sumn	nary	Examiner		Art Unit				
		Betelhem S	Shewareged	1774				
The MAILING DATE of this of Period for Reply	communication ap	pears on the	cover sheet with the	correspondence addres	s			
A SHORTENED STATUTORY PE		VIC CET TO	NEVELDE 2 MONTH	(S) EDOM				
THE MAILING DATE OF THIS CC  - Extensions of time may be available under the after SIX (6) MONTHS from the mailing date of the period for reply specified above, the mailing to the period for reply is specified above, the mailing to reply within the set or extended perion and period for reply within the set or extended perion and period period for reply received by the Office later than three earned patent term adjustment. See 37 CFR	MMUNICATION.  provisions of 37 CFR 1.  If this communication.  In thirty (30) days, a repaired of for reply will, by statute months after the mailir		nt, however, may a reply be to lory minimum of thirty (30) da expire SIX (6) MONTHS fror cation to become ABANDON	mely filed ys will be considered timely. n the mailing date of this commu	nication.			
1)⊠ Responsive to communication	on(s) filed on <u>28 A</u>	<u> August 2003</u> .						
2a)⊠ This action is <b>FINAL</b> .	2b)∐ This	s action is no	n-final.					
3) Since this application is in coclosed in accordance with the					rits is			
Disposition of Claims								
4)⊠ Claim(s) <u>1-3 and 5-22</u> is/are	pending in the ap	oplication.						
4a) Of the above claim(s) 16			sideration.					
5)⊠ Claim(s) <u>12-15</u> is/are allowe								
6)⊠ Claim(s) <u>1-3 and 5-11</u> is/are	rejected.							
7) Claim(s) is/are object	ed to.							
8) Claim(s) are subject t	o restriction and/	or election re	quirement.					
Application Papers								
9)☐ The specification is objected	to by the Examin	er.						
10)☐ The drawing(s) filed on	_ is/are: a)⊟ acc	cepted or b)[	objected to by the	Examiner.				
Applicant may not request that	any objection to the	e drawing(s) be	e held in abeyance. Se	ee 37 CFR 1.85(a).				
Replacement drawing sheet(s)	including the correc	ction is require	d if the drawing(s) is ol	ojected to. See 37 CFR 1	.121(d).			
11)☐ The oath or declaration is ob	jected to by the E	xaminer. Not	e the attached Office	e Action or form PTO-1	52.			
Priority under 35 U.S.C. §§ 119 and	120							
12) Acknowledgment is made of a) All b) Some * c) No	one of:		,	a)-(d) or (f).				
1. Certified copies of the				ian Na				
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application from the Ir				·	,,0			
* See the attached detailed Offi								
13) Acknowledgment is made of a since a specific reference was 37 CFR 1.78.								
a) The translation of the for								
14) Acknowledgment is made of a reference was included in the								
Attachment(s)								
1) Notice of References Cited (PTO-892)				y (PTO-413) Paper No(s)				
Notice of Draftsperson's Patent Drawing     Information Disclosure Statement(s) (PTC)			5) Notice of Informal (6) Other:	Patent Application (PTO-152	)			

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#### **DETAILED ACTION**

1. Applicant's response filed on 08/28/2003 has been fully considered. Claims 1, 10, 12 and 15 are amended, claim 4 is cancelled, claims 21 and 22 are added, and thus claims 1-3 and 5-21 are pending. (NOTE: Claims 16-22 are withdrawn from consideration as non-elected claims).

#### Election/Restrictions

2. Since new claims 21 and 22 are directed to a method of transferring or applying an image, the claims are classified under the non-elected Group III, therefore, the claims are withdrawn from consideration.

## Claim Rejections - 35 USC § 112

- 3. The following is a quotation of the first paragraph of 35 U.S.C. 112:
  - The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.
- 4. Claims 1-3 and 5-11 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter, which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. In claim 1, the specification fails to provide a support for polyamides that are one of lauryllactum polymers, caprolactum polymers, and combination thereof. The specification recites orgasol® as the polyamide.

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Orgasol® is a polymer of lauryllactum, a polymer of caprolactum or a copolymer of lauryllactum and caprolactum. However, the polyamide in claim 1 is not limited to Orgasol® polyamide, it may also include other types of polyamides that are one of lauryllactum polymers, caprolactum polymers, and combination thereof, for example, poly(e-caprolactom) and  $\epsilon$ -aminocaprolactam. Therefore, claim 1 contains new subject matter. For the purposes of examination, the type of claimed polyamide is not limited to a polymer of lauryllactum, a polymer of caprolactum or a copolymer of lauryllactum and caprolactum.

### Claim Rejections - 35 USC § 102

5. Claims 1-3 and 5-9 are rejected under 35 U.S.C. 102(b) as being anticipated by Kronzer et al. (US 5,242,739).

Kronzer discloses an image receptive heat transfer paper comprising a flexible cellulosic non-woven web base sheet and an image receptive melt transfer film layer over the base sheet, wherein the image receptive melt transfer film layer comprises a binder and a powdered polymer, wherein the amount of the binder is 15-80% by weight and the amount of the powdered polymer is 85-20% by weight (col. 3, lines 53-68). The image receptive melt transfer film layer is equivalent to the claimed at least one melt transfer ink absorption layer. The binder can be ethylene-acrylic acid copolymer (col. 6, line 29). The powdered polymer can be polyamide (col. 14, line 4) and it has a particle diameter of 2-50 micrometer (col. 6, line 7), wherein the particle diameter is within the claimed particle size range. The binder melts in the range of 65 to 180 °C (col. 6, line

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5), which overlaps with the claimed melting range. The calculated weight ratio of binder to powdered polymer is 1:0.25 to 1:5.66, which overlaps with the claimed weight ratio of matrix material to filler. The calculation is done as follow: 15% by weight of binder/85% by weight of powdered polymer = 1:5.66, and 80% by weight of binder/20% by weight of powdered polymer = 1:0.25. The thickness of the image receptive film layer is 12 to 80 micrometer, which overlaps with the claimed thickness (col. 6, line 10). The image receptive melt transfer film layer can be separated into a melt transfer film layer and an image receptive film layer, and in this instance the melt transfer film layer is disposed between the base sheet and the image receptive film layer (col. 7, line 9). The image receptive film layer and the melt transfer film layer are equivalent to the claimed melt transfer ink absorption layer comprising a plurality of layers as recited in claim 8. The melt transfer film layer comprises a binder (col. 4, line 7). Since the melt transfer film layer is missing the powdered polymer, there is a concentration gradient of the powdered polymer in the image receptive melt transfer film layer as recited in claim 9.

6. Claims 1-3 and 5-11 are rejected under 35 U.S.C. 102(a) as being anticipated by Hare et al. (US 6,087,061) as evidenced by Kronzer et al. (US 5,242,739).

Hare discloses a hot peel transfer for dry release and adhesion, comprising a polyethylene terephthalate (PET) support and a transfer material coated on the support (col. 4, line 8 and col. 8, lines 55-61). Hare further discloses the transfer material of Kronzer et al. (US 5,242,739) as a suitable transfer material to be applied on the support. The transfer material of Kronzer is disclosed above in paragraph 4. The PET

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is equivalent to the claimed polyester backing material because PET is known as a polyester material. Since the support material of Hare and the claimed backing material are substantially identical, the heat resistance of the support of Hare would inherently be equivalent to the claimed heat resistance as in claim 11.

### Response to Arguments

7. Applicant's argument is based on that the prior arts do not expressly disclose that their transfer medium is receptive to ink jet ink. This argument is not persuasive because the prior arts teach all of Applicant's claimed compositional and positional limitations. (See paragraphs 5 and 6 above).

Applicant further argues that the prior arts fail to disclose any of the same materials for filler as compared to those recited in claim 1. This argument is not persuasive because the prior arts disclose at least one of the claimed materials for the filler, that is the polyamide (see paragraph 4 above).

For the above reasons claims 1-3 and 5-11 stand rejected.

### Allowable Subject Matter

8. Claims 12-15 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. Neither Kronzer nor Hare teach or suggest a transfer system having a backing material with a rough release surface and a non-meltable dulling material or layer as recited in claims 12-15.

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#### Conclusion

9. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Betelhem Shewareged whose telephone number is 703-305-0389. The examiner can normally be reached on Mon.-Thur. 7:30AM-6:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Cynthia H Kelly can be reached on 703-308-0449. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9306.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0651.

BS B.S November 17, 2003.

CYNTHIA H. KELLY SUPERVISORY PATERT EXAMINER

TECHNOLOGY CENTER 1700